

Examiner's Amendment

1. An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to Applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

- The title has been amended as follows: after "Medium", the following phrase/word was inserted: "With a First and Second Magnetic Layer Having Substantially the Same Urethane Group Concentration".

2. An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to Applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

3. Authorization for this Examiner's amendment was given in a telephone interview and/or FAX request with Mr. Robert Depke on April 28, 2009.

The application has been amended as follows:

- Claim 1, at the end of the claim: the following phrase was inserted: ", and wherein the first and second magnetic layers are deposited via a Wet-on-Wet method".
- Claims 5 – 7 are cancelled.

Reasons for Allowance

4. The present claims are deemed allowable over the references of record since the references of record fail to disclose or render obvious the combined limitations.

While the prior art of record disclose the general knowledge of:

- binder-type media comprising first and second magnetic layers;
- first magnetic layers being substantially thicker than second magnetic layers, wherein the sum of the total thickness can be approximately 3.0 μm ;
- using polyurethanes in both magnetic layers;
- using polyester polyols having an alicyclic framework with a diisocyanate to produce polyurethanes;
- controlling the urethane group concentration in at least a single magnetic layer to be 0.5 - 3.0 mmol/g;
- and adding alkali metal sulfonate into polyurethanes in the claimed range.

The prior art fails to teach with sufficient specificity the "picking and choosing" that would be required to include all of the above limitations within the claimed framework, especially when combined with the requirement that the polyurethane group concentration in both the first and second magnetic layers are substantially the same. This is further evidenced by Applicants' as-filed disclosure, which provides secondary considerations that the claimed combination would be unobvious to one of ordinary skill in the art by providing evidence that the use of a first and second magnetic layer meeting the claimed urethane group concentrations when deposited by a Wet-on-Wet process results in an unexpected improvement in the characteristics of the recording

medium by the elimination of undesired streaks or surface characteristics (*see Applicants' Arguments*).

5. Any comments considered necessary by Applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Examiner's Comments

6. In order to better clarify the record, the Examiner wishes to point out the following pertinent prior art:

- Ohkubo et al. (U.S. Patent No. 5,932,330) disclose coated binder-type media having an upper magnetic layer and a lower primer layer (*which can be magnetic*), but explicitly teach away from using the same urethane group concentration in the upper and lower magnetic layers (*col. 5, lines 25 - 62*).
- Kobayashi et al. (U.S. Patent No. 6,063,489) teach a binder-type media having first and second magnetic layers similar to Applicants' claimed thickness ranges, but provides no real guidance on the selection of the binders for these layers (*entire disclosure*). The Examiner also notes that Kobayashi et al. appears to teach away from a total thickness of approximately 3.0 μm , with the preferred embodiments having a maximum total thickness of about 2.2 μm (*col. 6, lines 12 - 16 and col. 7, lines 25 - 36*).

- IDS references JP 05-135354 and JP 09-204639 disclose binder-type recording media having first and second magnetic layers, but utilize different polyurethanes in both layers and provide no guidance for meeting many of the claimed limitations (*entire disclosures, especially examples*);
- IDS reference JP 02-168417 disclose using the same *kind* of binder in both layers (*Abstract*), but fails to provide any specifics that differ from the prior art already of record (*which the Examiner notes all essentially disclose using the same "kinds" of binders - mainly polyurethane and polyvinyl chloride blends - but still do not meet all the claimed limitations, as noted above*).
- Murayama et al. (U.S. Patent 6,010,773), Hashimoto et al. (U.S. Patent No. 6,045,901) and Oguchi et al. (U.S. Patent No. 5,470,645), all of record, appear to explicitly disclose very different polyurethanes in the first and second magnetic layers, rendering no guidance towards utilizing a first and second magnetic layer having substantially the same urethane group concentration.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Kevin M. Bernatz whose telephone number is (571) 272-1505. The Examiner can normally be reached on M-F, 9:00 AM - 5:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Rena Dye can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Kevin M Bernatz/
Acting SPE of Art Unit 1794

May 1, 2009